

CLAIMS:

1. A method of scaling a three-dimensional input model (200-208) into a scaled three-dimensional output model (210-224), the method comprising:
 - determining for portions of the three-dimensional input model (200-208) respective probabilities that the corresponding portions of the scaled three-dimensional output model (210-224) are visible in a two-dimensional view of the scaled three-dimensional output model, the determining being based on a projection of the three-dimensional input model (200-208) in a viewing direction; and
 - geometrically transforming portions of the three-dimensional input model into the respective portions of the scaled three-dimensional output model on basis of the respective probabilities.
2. A method of scaling a three-dimensional input model (200-208) as claimed in claim 1, whereby determining the probability that the first one of the portions is visible, is based on comparing a first value of a first coordinate of the first one of the portions with a second value of the first coordinate of a second one of the portions.
3. A method of scaling a three-dimensional input model (200-208) as claimed in claim 2, whereby determining the probability that a first one of the portions is visible, is based on capabilities of a display device (100) on which the three-dimensional scaled output model (210-224) will be displayed.
4. A method of scaling a three-dimensional input model (200-208) as claimed in claim 3, whereby the capabilities of the display device (100) correspond to a maximum viewing angle and a depth-range of the display device (100).
5. A method of scaling a three-dimensional input model (200-208) as claimed in claim 1, whereby the geometrically transforming the portions of the three-dimensional input model into the respective portions of the scaled three-dimensional output model on basis of the respective probabilities comprise one of translation, rotation or deformation.

6. A method of scaling a three-dimensional input model (1-8) as claimed in claim 1, comprising:
- computing the projection (302) of the three-dimensional input model (1-8) by means of a z-buffer stack (300);
 - indicating which of the z-buffer stack elements are visible in the projection by means of comparing z-values of pairs of z-buffer stack elements having mutually equal x-values and mutually equal y-values;
 - determining which groups of z-buffer stack elements form the respective portions of the three-dimensional input model (1-8), by means of segmentation of the z-buffer stack elements; and
 - indicating the probability of visibility of each z-buffer stack element which is part of a group of z-buffer stack elements comprising a further z-buffer stack element which is visible.
7. A method of scaling a three-dimensional input model (200-208) as claimed in claim 6, further comprising
- determining for each array of z-buffer stack elements having mutually equal x-values and mutually equal y-values a corresponding minimum z-value and maximum z-value; and
 - computing scaled z-values for the z-buffer stack elements on basis of the respective minimum z-values and maximum z-values and the depth-range of the display device (100).
8. A method of scaling a three-dimensional input model (200-208) as claimed in claim 7, whereby determining minimum z-values is based on a morphologic operation.
9. A scaling unit (400) for scaling a three-dimensional input model (200-208) into a three-dimensional scaled output model (210-224), the scaling unit (400) comprising:
- probability determining means (402) for determining for portions of the three-dimensional input model (200-208) respective probabilities that the corresponding portions of the scaled three-dimensional output model (210-224) are visible in a two-dimensional view of the scaled three-dimensional output model, the determining being based on a projection of the three-dimensional input model (200-208) in a viewing direction; and

- transforming means (408) for geometrically transforming portions of the three-dimensional input model into the respective portions of the scaled three-dimensional output model on basis of the respective probabilities.

- 5 10. An image display apparatus (700) comprising:
- receiving means (702) for receiving a signal representing a three-dimensional input model (200-208);
 - a scaling unit (400) for scaling the three-dimensional input model (200-208) into a scaled three-dimensional output model (210-224), as claimed in claim 9; and
 - 10 - display means (100) for visualizing a view of the scaled three-dimensional output model (210-224).